

WHAT IS CLAIMED IS:

1           1.    A screw grommet comprising a shank to be  
2    inserted into a mounting hole in a workpiece and a flange  
3    formed at one end of the shank that is larger than the  
4    mounting hole in the workpiece, wherein a cavity is formed  
5    in the flange and the shank into which a tapping screw can  
6    be screwed to join a mounted member to the workpiece,  
7    wherein the shank has a rectangular cross-section  
8    appropriate for a rectangular cross-section mounting hole  
9    in the workpiece, wherein both the flange, and a section  
10   of the shank that extends from the flange a distance that  
11   is substantially less than the length of the shank, are  
12   divided by a plurality of axial slits, to allow a section  
13   of the shank to widen in a direction perpendicular to the  
14   axial direction of the shank by screwing the tapping screw  
15   into the cavity, wherein protrusions are formed on the  
16   outer periphery of the shank separated axially from the  
17   flange by about the thickness of the workpiece, and  
18   wherein the protrusions are arranged diagonally to one  
19   another in the rectangular cross-section of the shank.

1           2.    A screw grommet in accordance with claim 1,  
2    wherein the axial slits are formed in positions

3 corresponding to the center of the sides of the periphery  
4 of the rectangular cross-section of the flange and the  
5 shank, and wherein the protrusions have an L-shaped cross-  
6 section embracing corresponding corners of the rectangular  
7 cross-section of the shank.

1        3. A screw grommet in accordance with Claim 1,  
2 wherein the slits terminate at about the middle of the  
3 axial length of a portion of the cavity engaged by threads  
4 of the screw, and wherein a section of the cavity  
5 extending axially without slits toward the tip of the  
6 shank has a length able to accommodate at least one pitch  
7 length of the screwed in tapping screw.

1        4. A screw grommet having a shank and a flange at  
2 one end of the shank, the flange and the shank having a  
3 cavity extending axially of the screw grommet and the  
4 flange and the shank being divided by a plurality of slits  
5 extending axially of the screw grommet along only a  
6 portion of the axial length of the cavity.

1        5. A screw grommet according to Claim 4, wherein the  
2 flange and the shank have rectangular cross-sections and

3 the slits divide the sides of the rectangular cross-  
4 section of the flange.

1 6. A screw grommet according to Claim 5, wherein the  
2 shank has a plurality of protrusions extending from an  
3 outer surface of the shank at positions spaced from the  
4 flange.

1 7. A screw grommet according to Claim 6, wherein the  
2 protrusions embrace corresponding corners of the  
3 rectangular cross-section of the shank.

1 8. A screw grommet according to Claim 7, wherein the  
2 protrusions are disposed at opposite corners of the  
3 rectangular cross-section of the shank.

1 9. A screw grommet according to Claim 6, wherein  
2 each of the protrusions has a shoulder facing the flange  
3 and has an inclined surface that approaches an outer  
4 surface of the shank in a direction toward a tip of the  
5 shank remote from the flange.

1           10. A screw grommet according to Claim 6, wherein  
2 the screw grommet has an associated tapping screw  
3 dimensioned to be screwed into the cavity through the  
4 flange, and wherein the slits extend over an axial length  
5 of the shank that is about half the axial length of  
6 threads of the screw.

1           11. A screw grommet having a shank and a flange at  
2 one end of the shank, wherein the flange and the shank  
3 have rectangular cross-sections and the shank has a pair  
4 of protrusions extending from an outer surface of the  
5 shank at positions spaced from the flange, and wherein the  
6 protrusions embrace corresponding diagonally disposed  
7 corners of the rectangular cross-section of the shank.